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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,942	09/18/2000	Mireille Maubru	05725.0290-01	4634
22852	7590	10/28/2003	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			ELHILIO, EISA B	
		ART UNIT		PAPER NUMBER
		1751		14

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/663,942	MAUBRU, MIREILLE
	Examiner Eisa B Elhilo	Art Unit 1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 August 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 and 15-27 is/are rejected.
- 7) Claim(s) 10-14 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a)  The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>13</u> . | 6) <input type="checkbox"/> Other: _____                                    |

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### **DETAILED ACTION**

1 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on August 13, 2003 has been entered.

#### ***Claim Rejections - 35 USC § 103***

2 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-9, 15-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanji Narazaki et al. (JP 03220114) (English translation copy) in view of Yashihara et al. (US 5,102,655).

Kanji (JP' 114) teaches a hair dye composition comprising pigments as the coloring agents (see page 4, lines 17-20) and a polymerizable monomer unit of cross-linked polymers of acrylic acid and methacrylates with alkyl ester of acrylic acid that fall within the scope of the claimed cross-linked polymers as claimed in claims 1-3 (see page 5, lines 3- 8, page 7, formula (I) and page 8 lines 12-16), aqueous support of water and organic solvents to form a dye solution as claimed in claims 15 and 19 (see page 15, lines 14-19), adjuvant as claimed in claim 18 (see

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page 20, lines 1-8). The composition may be packaged as an aerosol as claimed in claim 20 (see page 27, lines 4-5). The hair dye compositions also contain a colorant such as carbon black (see page 17, lines 8-17). Kanji also teaches a process for dyeing hair by using a pigment as the coloring agent which similar to the claimed process. The process has been employed in which the pigment dispersed in a resin solution is applied to the hair and dried, thereby sticking the pigment to the hair with the resin to dye the hair temporarily as claimed in claims 21-27 (see page 4, last paragraph).

The instant claims differ from the reference by reciting a hair dyeing composition comprising direct dye components. Further, the reference fails to teach the cross-linked polymers in the claimed amounts. However, the reference teaches a pigment such as carbon black as a coloring agent for dyeing hair (see page 17, lines 8-17).

Yoshihara (US' 655) in analogous art of hair dyeing compositions teaches a composition comprising hair dyeing base components such as acid dyes, pigments such as carbon black and other coloring agents such as acridine dye, azine dye, quinoline dye and anthraquinone dye (see col. 4, lines 38-48).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the primary reference by substituting the carbon black pigment as a coloring agent with the acidic dyes, azo dyes or anthraquinone dyes as taught by Yoshihara to make such a dyeing composition. Such modification would be obvious because Yoshihara teaches the equivalence between the acid dyes, azo dyes or anthraquinone dyes and the pigment of carbon black and thus clearly suggests that these can be used in alternative, and thus, the person of the ordinary skill in the art would be

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motivated to substitute the pigment of the carbon black with the direct dyes and would expect such a composition to have similar properties to those claimed, absent, unexpected results.

With respect to the claimed amounts of the dyeing ingredients as claimed in claims 6-9 and 16-17, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amounts of the ingredients in the composition in order to get the maximum effective amounts in the composition, absent unexpected results.

3       Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanji Narazaki et al. (JP 03220114) (English translation copy) in view of Yashihara et al. (US 5,102,655) and further, in view of Halasz et al. (US 4,092,102).

The disclosures of Narazaki (JP' 114) and Yashihara (US' 102) are summarized above. The references do not teach or disclose a crosslinking polymerizable monomer of polyallyl ether as claimed.

However, the primary references teaches polymerizable monomer unit of cross-linked polymers of acrylic acid and methacrylates with alkyl ester of acrylic acid (see page 5, lines 3- 8, page 7, formula (I) and page 8 lines 12-16).

Halasz (US' 102), in a analogous art of hair dyeing formulations, teaches a composition comprising a water-soluble polymer of acrylic acid cross linked with about 1% of a polyallyl ether of sucrose as claimed in claims 4 and 5 (see col. 8, lines 5-7).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the primary reference by incorporating the polymer of acrylic acid of a polyallyl ether of sucrose as taught by Halasz to make such a composition. Such modification would be obvious because the primary reference

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suggests the use of cross-linked polymers of acrylic acid derivatives in the composition and Halasz as a secondary reference clearly teaches the claimed polymer of acrylic acid of a polyallyl ether of sucrose as a thickening agent (see col. 6, lines 42-49 and col. 8, lines 5-10), and, thus, a person of the ordinary skill in the art would be motivated to incorporate the polyallyl ether of sucrose as a thickening agent in the dyeing composition and would expect such a composition to have similar properties to those claimed, absent, unexpected results.

*Allowable Subject Matter*

Claims 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art of record does not teach or disclose at least one species of acid dyes, cationic azo dyes, nitrogenous heterocyclic groups, acid anthraquinonic dyes and cationic anthraquinonic dyes as claimed. Accordingly, the subject matter of claims 10-14 would not have been obvious to one of the ordinary skill in the art of hair dyeing formulations.

*Response to Applicant's Arguments*

5       Applicant's arguments filed 8/13/2003 have been fully considered but they are rendered moot in view of new ground of rejection.

With respect to the rejection based upon Narazaki (JP' 114) and Yashihara (US' 102), Applicant argues that there is no motivation to combine the reference teachings. The applicant also argues that there is no reasonable expectation of success to combine the references. Further, the applicant argues that there is no teaching of all the claim elements.

The examiner respectfully, disagrees with the above arguments because, Narazaki as a primary reference teaches and suggests the use of the carbon black pigment (see page 17, lines 8-17) as the coloring agent in the presence of polymeric thickening agents of cross-linked polymers of acrylic acid (see page 5, lines 3- 8, page 7, formula (I) and page 8 lines 12-16), which is similar to the claimed formula of acrylic residue units as claimed in claim 1, when in the claimed formula R1 is a hydrogen or alkali groups and methacrylates with alkyl ester of acrylic acid, which is similar to the claimed formula of acrylate as claimed in claim 2, when in the claimed formula R2 is alkyl radical and Yoshihara as a secondary reference clearly teaches the equivalence of pigments including the carbon black pigment and the direct dyes such as acidic dyes, azo dyes and anthraquinone dyes (see col. 4, lines 38-48). Yoshihara further, teaches the co-polymers of methacrylic acid and alkyl methacrylate and co-polymers of acrylic acid as the conditioning agents in the dyeing composition (see col. 6, lines 41-46), and, thus, a person of the ordinary skill in the art would be motivated to replace the carbon black pigment in the composition of Narazaki with the direct dyes of Yoshihara and would expect such a composition to have similar properties to those claimed. Therefore, the *prima facie* case of obviousness has been established.

### *Conclusion*

The newly presented references listed in form 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (703) 305-0217.

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The examiner can normally be reached on M - F (7:30-5:00) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Eisa Elhilo  
Patent Examiner  
Art Unit 1751

October 25, 2003.